

Title (en)
ROBUST INSTANTANEOUS FREQUENCY ESTIMATION FOR HEARING PROSTHESIS SOUND CODING

Title (de)
ROBUSTE SOFORTIGE FREQUENZKALKULATION FÜR GEHÖRPROTHESE UND TONCODIERUNG

Title (fr)
ESTIMATION DE FRÉQUENCE INSTANTANÉE ROBUSTE POUR CODAGE SONORE DE PROTHÈSE AUDITIVE

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Application
EP 16858084 A 20161019

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Abstract (en)
[origin: WO2017070138A1] A signal processing arrangement generates electrical stimulation signals to electrode contacts in an implanted cochlear implant array. An input sound signal is processed to generate band pass signals that each represent an associated band of audio frequencies. A characteristic envelope signal is extracted for each band pass signal based on its amplitude. Stimulation timing signals are generated for each band pass signal, including for one or more selected band pass signals using a timing function defined to: i. represent instantaneous frequency as determined by the band pass signal temporal fine structure features, and ii. exclude temporal fine structure features occurring within a time period shorter than a band-specific upper frequency limit. The electrode stimulation signals are produced for each electrode contact based on the envelope signals and the stimulation timing signals.

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